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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/558,293	04/25/2000	Mrudula Kanuri	95-343	9755

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EXAMINER

HARPER, KEVIN C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 08/24/2003

#5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/558,293

Applicant(s)

KANURI ET AL.

Examiner

Kevin C. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-22 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Drawings

New drawings were received on April 16, 2001. Figures 1 and 2 of these drawings are disapproved.

1. The drawings are objected to because the following requires descriptive wording (37 CFR 1.83 (a)):

Figure 1, item 12, one of items 14, one of items 24; and,

Figure 2, one of items 40.

2. Figure 2 is objected to because "24b" under the IP section should be --32b-- to indicate that the standard IP header is 32 bytes; "6b" under the VLAN section should be --12b-- to indicate that a standard VLAN identifier is 12 bytes.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this

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application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 and 8-22 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,574,240 ("Tzeng"). Although the conflicting claims are not identical, they are not patentably distinct from each other.

3. Regarding claims 1-5 and 12-14, these claims merely broaden the scope of claims 1-15 of Tzeng by eliminating the elements and their functions. It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969) (omission of a reference element whose function is not needed would be obvious to one skilled in the art).

4. Regarding claims 1-5 and 12-14, claims 1-15 of Tzeng recite all the limitations of claims 1-5 except that the claims of Tzeng additionally recite a port filter and interaction with the port filter with a IP rules queue to achieve layer 2 and 3 switching. One skilled in the art would recognize that removal of the port filter(s) and associated IP rules queue allows the switching decisions to be performed at a location other than at the port(s) while also not using an IP rules queue (see MPEP 2144.04 (II)(A)). Therefore, it would have been obvious to one skilled in the art at the time the invention was made not to have a port filter in each port and not to have an IP rules queue for determining packet forwarding in the invention of Tzeng. Further regarding claim 14, the specified functions of claims 1-15 of Tzeng are inherently performed by an evaluation module and output module.

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5. Regarding claims 6 and 15-16, claims 1-15 of Tzeng recite a rules queue and an inherent ingress module. However, claims 1-15 of Tzeng do not recite dropping a layer 2 packet based on layer 2 address information, layer 3 address information, and status information from the rules queue nor dropping a layer 2 packet based on the absence of a recognized prescribed source identifier within the IP address. Examiner takes Official Notice that a packet is discarded when network identifiers (such as a source or destination address) are not recognized in order to prevent routing a packet to an invalid destination address, to prevent routing a packet from an unknown or unauthorized source, or to prevent routing a packet that has potential errors in the header. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to discard a layer 2 packet with unrecognized address information in the invention of Tzeng.

6. Regarding claims 8-9 and 17, claims 1-15 of Tzeng do not recite dropping a layer 2 packet in response to the packet having a TTL of zero nor decrementing a TTL counter in a layer 2 packet. Examiner takes Official Notice that at a switch a TTL counter of a packet is decremented and/or a packet is dropped when a counter within the packet header reaches zero to remove the packet from the network if it has gone through too many switches (i.e., to prevent misrouting or circular routing) or to prevent a delay-sensitive packet from having a larger than intended delay while being transferred through a network. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to decrement a TTL counter and/or drop a packet having a TTL of zero at a switch in the invention of Tzeng.

7. Regarding claim 10, claims 1-15 of Tzeng (in particular claims 3 and 12) recite replacing at a router a destination MAC address in a layer 2 packet based on the destination IP address.

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However, the claims do not recite that a previous MAC address specifies the router. One skilled in the art would recognize that a router on an network (LAN) has a MAC address and that the router is used to relay packets to another destination in the network or another network.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to address a layer 2 packet to a router in the invention of Tzeng in order to route data from a location within the same network as the router to a destination beyond the router.

8. Regarding claim 11, claims 1-15 of Tzeng do not recite recalculating an IP checksum and recalculating a MAC CRC when replacing the MAC address. Examiner takes Official Notice that header information in a network packet is protected from error by coding and that the header of the network packet is verified at switching entities in order to prevent misrouting of the packet. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to recalculate an IP checksum and to recalculate a MAC CRC based on a new MAC address in the invention of Tzeng.

9. Regarding claims 18-19, claims 1-15 (in particular claim 6) of Tzeng recite an address lookup module. However, the claims do not recite that the source address is a non-router network node. Examiner takes Official Notice that a network comprises interconnected non-router network nodes (i.e., end-users) which transfer packets over the network. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to store the address of a non-router network node in the invention of Tzeng in order to properly route packets according to the invention from that source.

10. Regarding claims 20 and 22, claims 1-15 of Tzeng do not recite the output module assigning a switching decision a priority. Examiner takes Official Notice that packets are

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assigned a switching priority in order to give transmission or drop precedence to real-time or control packets. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a switching priority for packets in the invention for Tzeng.

11. Regarding claim 21, claims 1-15 of Tzeng do not recite decrementing a TTL counter in a layer two packet. Examiner takes Official Notice that at a switch a TTL counter of a packet is decremented to remove the packet from the network if it has gone through too many switches (i.e., to prevent misrouting or circular routing) or to prevent a delay-sensitive packet from having a larger than intended delay while being transferred through a network. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to decrement a TTL counter at a switch in the invention of Tzeng.

Allowable Subject Matter

12. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

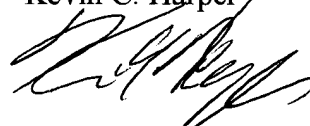
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays, except Wednesday, from 9:30 AM to 8:00 PM ET.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463. The fax number for Technology Center (TC) 2600 is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office for TC 2600 at 703-306-0377.

Kevin C. Harper

A handwritten signature in black ink, appearing to read 'Kevin C. Harper', written over a horizontal line.

August 21, 2002